

Amendments to the Specification:

Please amend the specification as follows:

On page 6, first paragraph please amend as follows:

In the event of accidents such as short-circuits, the cable of the present invention diverts fault currents to the former or a normal-conducting metal layer provided on the inner circumference of the second superconducting layer and also diverts the fault currents to the superconducting layers. For example, when the superconducting layers are formed from superconducting wires constituted by the aforementioned matrix and superconducting material, if the superconducting layers are changed from the superconductive state to the normal conductive state due to temperature rises caused by the passage of fault currents therethrough, the superconducting material will be changed to an insulator, thus causing currents to flow through the matrix. In order to suppress heat generation due to the passage of current through the matrix, it is required that the superconducting wires contain a certain amount of silver or silver alloy within the matrix. On the other hand, if the ratio of the matrix in the superconducting wires is increased, the part of the superconducting material of the superconducting wires will be reduced, thereby lowering the critical current density. Therefore, in order to raise the critical current density, the diameter of the superconducting wires must be increased, namely the superconducting cable itself must be made larger. This is, however, undesirable when a compact cable configuration is required. Therefore, in order to realize both suppression of heat generation and reduction of the critical current density in a balanced manner, it is desirable that matrix ratio is within a range between 1.5 or more and 3.0 or less. The term "matrix ratio" refers to the ratio of the cross-sectional area of the matrix to the cross-sectional area of the superconducting material (the cross-sectional area of matrix/the cross-sectional area of superconducting material).

On page 2, first paragraph of the specification please amend as follows:

In the event of accidents such as short-circuits or ground faults in the electric-power system for the superconducting cable, this will induce large currents therein. Therefore, there is a need for taking measures for suppressing fault currents such as the installation of a

current-limiting device, because otherwise large currents exceeding steady-state currents will flow through the superconducting cable. For example, when the rated voltage is 350 MV and the rated current is 3 kA, a short-circuit current of about 31.5 kA/see will be induced in the event of short-circuit accidents (in an exemplary line, a current of about 31.5 kA will flow for 1 second). When large currents exceeding the critical current value flow through the superconducting conductor, this superconducting conductor will be shifted (quenched) to a normal-conductor, and this shift will induce Joule losses (heat losses). Concurrently, large currents will be induced in the shield layer, which will shift the shield layer to a normal conductor, thus causing Joule losses. Particularly, when significant Joule losses are caused, this may cause burning of the superconductor wires constituting the superconducting conductor or the shield layer or otherwise may suddenly raise the temperature thereof to vaporize refrigerant trapped in voids within the wires, resulting in ballooning (nitrogen ballooning) of the superconducting wires and thus lowering the critical current value. Further, the vaporization of refrigerant may cause dielectric breakdown. In this case, it will require a significantly long time to repair damages caused by such accidents.